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REPORT AND RECOMMENDATION

OF THE

PRESIDENT

TO THE

EXECUTIVE DIRECTORS

ON A

PROPOSED LOAN

TO THE

REPUBLIC OF KOREA

FOR A

FIFTH RAILWAY PROJECT

March 26, 1975

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Currency Unit	=	Won
Won 485	=	US\$1.00
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Won 1,000,000	=	US\$2,061.86
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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO
THE REPUBLIC OF KOREA FOR A FIFTH RAILWAY PROJECT

1. I submit the following report and recommendation on a proposed loan to the Republic of Korea for the equivalent of US\$100.0 million to help finance the foreign exchange cost of a fifth railway project. The total project cost is estimated at \$292.0 million equivalent of which the foreign exchange component is expected to amount to \$185.0 million equivalent. The remaining \$85.0 million of the foreign exchange expenditure will be met through borrowing from other foreign sources as indicated in the Financing Plan which forms part of Annex III. The loan would have a term of 25 years, including five years of grace, with interest at 8-1/2 percent per annum.

PART I - THE ECONOMY

Background

2. The last economic report ("Current Economic Position and Prospects of the Republic of Korea") was distributed under cover of R74-42 dated March 4, 1974. An assessment of Korea's economic situation is given below. An Economic Updating Mission returned in February 1975 after completing its field work in Korea; its report is under preparation. The Country Data Sheets are included in Annex I.

3. Korea's economic performance over the last decade has been outstanding. In the period 1964-73, the GNP growth rate averaged 10 percent a year in real terms and real per capita income more than doubled. The rapid rise of output and an appreciable decline in the population growth rate (from nearly 2.7 percent in the early sixties to 1.7 percent in 1973) were major reasons for the rapid increase in income. A key factor in the growth of the economy has been the increase of manufactured exports from about \$60 million in 1964 to \$2,800 million in 1973. Such exports in 1973 accounted for over 90 percent of commodity exports and about 29 percent of industrial output. The ratio of exports to GNP rose rapidly from 4 percent in 1964 to 27 percent in 1973 and the manufacturing sector as a proportion of GNP increased from 16 percent to 28 percent in the same period. Agriculture, which has had a growth rate of about 3.5 percent a year over the past several years, declined as a proportion of GNP from 46 percent in 1964 to 23 percent in 1973.

4. Rapid growth transformed the Korean economy from one characterized by dependence on agriculture and sluggish growth in the 1950s to one of dynamic growth based on increasing industrialization in the 1960s. Nevertheless, there have been problems. The two which have caused the Korean Government most concern are (a) the resource management problem, resulting from a heavy reliance on external capital and (b) the question of distribution of growth benefits, arising out of a faster productivity growth in manufacturing than in agriculture.

5. Total real investment grew six-fold between 1964 and 1973, and the ratio of investment to GNP rose from 13 percent to 25 percent. External resource requirements also grew rapidly during 1970-71 averaging over 9 percent of GNP, roughly the same level as in the early sixties. The marginal saving rate during the last decade was 30 percent which would indicate that the large capital inflows did not weakened efforts to mobilize resources domestically. Korea, however, entered upon a period of rapid growth with a very low level of domestic savings and, therefore, in the interest of rapid acceleration of investment and growth tolerated relatively heavy dependence on external capital. In the early seventies when financial difficulties resulted from bunching of payments due on short and medium term debt and a sharp rise in the debt service ratio, the Government took corrective action to moderate the rate of private investment, to increase the inflow of capital on concessional terms from official sources, to impose restrictions on suppliers' credits, and to improve the balance of payments position through substantial exchange rate adjustments.

6. These measures, combined with a reduction in Government real investment and uncertainty in the Korean business community about export prospects, produced a marked slowdown in the economy during the 1970-72 period. Even with a continued high rate of export expansion (about 50 percent per annum on average in current terms), real GNP growth averaged only 8 percent per annum during 1970-72, compared with about 13 percent in the preceding three years. Real investment stagnated during 1970-72, and the ratio of fixed investment to GNP dropped from 27 percent in 1969 to 22 percent in 1972.

7. Although income distribution in Korea is generally more equitable than in comparable developing countries, the benefits of economic growth have not been shared evenly. The absolute gap in incomes between urban and rural areas widened during the 1960s despite a massive migration to the cities. Growth of labor productivity in agriculture has been considerably slower than in the manufacturing sector. Since 1967, the Government has attempted to raise farm incomes and to provide incentives for increasing foodgrain production through a price support system for rice and barley. These measures reduced markedly the gap between average rural and urban incomes during 1968-72. Nevertheless, growth of the industrial sector is likely to continue to be more rapid than that of the agricultural sector, and the Government believes that, unless the proportion of rural incomes provided by non-farm sources is increased, the disparity of incomes will tend to widen. Therefore, the Government broadened its efforts to achieve more balanced growth by pursuing policies of decentralizing industry and emphasizing investment in the less developed regions, and in late 1971 initiated the Sae Maeul (New Community) Movement as a nationwide comprehensive self-help program to increase productivity and incomes in the rural areas, where nearly half the population still lives, and to improve the quality of rural life.

Recent Changes

8. During the last two years or so the Korean economic situation has been subject to sudden and sharp changes. Beginning with the latter part of 1972, the Korean economy witnessed an unprecedented boom. 1973 was an exceptional year, even by Korean standards, and set new records of growth in GNP, exports and savings. GNP grew by 16.5 percent in real terms, primarily because of increases in exports and fixed investment. Commodity exports, in nominal terms, rose by over 90 percent, denoting an increase in real terms of about 60 percent. National savings, which had dropped to about 15 percent of GNP in 1972, rose to 22 percent in 1973, surpassing the previous peak (1970) of about 18 percent. Foreign savings were only about 3 percent of GNP and financed only about 12 percent of total investment, compared with about 40 percent from 1968 to 1971. The rapid rise in foreign exchange earnings, which included a marked increase in tourism income, also reduced the ratio of debt service payments to export receipts to about 10 percent in 1973.

9. The remarkable performance of the economy in 1973 encouraged both business and Government to view the future with increased confidence. In the latter part of 1973, Korean economic aspirations were expressed in terms of targets of \$1,000 per capita income and \$10 billion of exports by the early 1980's. The long-term strategy implied the continuation over the next decade of the overall rate of GNP growth of about 10 percent per annum but with reduced dependence, in relative terms, on net inflows from abroad. At the same time, major structural shifts were being planned for manufacturing. The objective of deepening the industrial structure was to be achieved by emphasizing shipbuilding, steel, petrochemical and metal-working industries, while continuing to develop existing industries such as textiles and electronics. The long-term plan also provided for the achievement of parity between rural and urban household incomes by the early 1980's through accelerated growth in labor productivity in agriculture and an increase in off-farm employment by greater regional dispersion of industry.

10. The favorable economic developments of 1973 were interrupted by external developments in 1974. The sharp rise in the price of petroleum in late 1973, the recession in the Japanese and the U.S. economies during 1974, and the high level of foodgrain import prices have combined to bring about a major change in the short-term economic position of Korea. Owing to its poor natural resource endowment and because of its economic structure and growth strategy, Korea was severely affected by these recent international developments. Merchandise exports now account for about 30 percent of GNP in Korea and dependence on the Japanese and U.S. markets has remained heavy. A major element in the Korean export picture during 1973 was an expansion of over 200 percent in exports to Japan, which was made possible by a very sizeable expansion in total Japanese imports. Nearly 75 percent of total Korean exports went to the U.S. and Japan during 1973. Korea was thus particularly vulnerable to the recession in the Japanese and U.S. economies during 1974. The revival of the Japanese economy and the future trend in Japanese manufactured goods imports will probably continue to be major determinants of the Korean growth rate in the future, although the Government

is making efforts to diversify its export markets by encouraging sales in the Middle East and Europe.

11. In the short-run, however, the higher costs of energy and food imports have added a burden to the economy which is even more serious than the setback to export growth. Korean dependence on imported fuels is not only extremely heavy but is very closely linked to essential industrial and transport uses. The passenger vehicle fleet is small, with only one private car per 152 families; truck transport and diesel-powered rail traffic are the basic transport modes for commercial goods. The higher costs of petroleum added almost \$800 million to the Korean import bill between 1972 and 1974. Over the same period, the three-fold rise in the prices of foodgrains increased foreign exchange requirements by more than \$350 million, despite a decline in the volume of imports. Korea is at present importing about 2 million tons of wheat and about half a million tons of rice annually, constituting respectively 85 percent and 11 percent of total domestic consumption. Together petroleum and foodgrains accounted for 36 percent of Korea's increased import bill in 1974 and 25 percent of total import payments that year.

12. These international developments have greatly weakened the Korean balance of payments position in 1974 and prospectively in 1975, slowed the rate of growth of output and employment and increased inflationary pressures.

13. The current account balance of payments deficit widened from the low level of \$308 million in 1973 to an estimated \$1,440 million during 1974, or by more than \$1,100 million. The major factors in the deterioration were an adverse swing in the terms of trade of 16 percent (equivalent to a loss of about 5 percent of GNP) and a large negative balance on the services account, due in part to a decline in tourism receipts. The deterioration was notwithstanding a substantial further improvement in real exports of about 10 percent, to a total of \$4.8 billion, and only a modest growth in real imports. The entire improvement in export volume was concentrated in the first half of 1974. Real export earnings in the final quarter of 1974 are estimated to have been six percent below the corresponding quarter of 1973.

14. At current prices, total import payments (c.i.f.) are estimated to have been about \$6.9 billion in 1974, an increase of \$2.3 billion, or about 63 percent, over 1973. But in real terms, imports are estimated to have increased by little more than 2 percent in 1974, mainly as a result of decreases in imports of grains and capital goods, and only a small increase in raw materials.

15. It is estimated that the net inflows of capital (medium and long-term loans and foreign private investment) into Korea during 1974 remained at the 1973 level of about \$1 billion. Consequently, the increased current account deficit had to be financed entirely through an increase in private short-term debt, a reduction of external reserves, Bank of Korea borrowings

abroad and drawings on the IMF gold tranche and first credit tranche and the use of the IMF oil facility. Korea's net international reserves, which stood at about \$945 million at the end of 1973, had declined to about \$90 million by the end of 1974. The rundown of net reserves enabled the maintenance of levels of imports and economic activity in 1974 which otherwise would not have been possible.

16. Notwithstanding the Government's policy, the impact of external developments on Korea's domestic output, employment and prices has been marked. In the first half of 1974, GNP continued to grow in real terms by 14 percent over the corresponding period of 1973, as industrial output and real exports continued to increase and fixed investment remained at a relatively high level. In the second half of the year, however, there was a sharp slowdown in industrial output, private fixed investment and export sales (particularly for textiles and plywood). The GNP for the second half of 1974 is estimated to have been only about 3 percent above the level in the latter half of 1973. Despite the levelling off of industrial production there was a substantial build up in inventories of export products. Unemployment began to rise as a result of the combined effects of the industrial slowdown, business failures and temporary closures. Between August and November, 20,000 workers were idled. Failures of over 100 businesses in textiles, ceramics and electronics were reported and more than 250 others experienced temporary closures for varying periods. More than 650 businesses partially curtailed operations. Open unemployment at the end of 1974 is estimated to have reached about 600,000, or about 5 percent of the labor force, compared with an average of about 4 percent in 1973. However, because of less overtime, fewer shifts and partial workweeks, the real increase in unemployment and the decline in real wages was much greater.

17. Imported inflation has led to a very sharp upward pressure on the domestic price level. In addition to the sharply higher prices of imported petroleum and foodgrains, the average unit value of other imports increased by 45 percent during 1974. ^{1/} Consequently, the rate of domestic inflation accelerated with consumer prices rising at an annual rate of 31 percent between December 1973 and June 1974 and wholesale prices increasing at double that rate. Since the middle of the year the rate of domestic inflation has slowed somewhat, reflecting seasonal factors, the slower increase in the prices of imported goods and the dampening effects of rising inventories of manufactured goods. It is estimated that during calendar year 1974, wholesale prices rose by about 45 percent.

18. In general, the Government is committed to accepting necessary adjustments arising from higher energy and other import costs. It was not, however, prepared to place on consumers the full burden of higher import costs of basic foodstuffs. Thus, despite dramatic increases in prices paid by consumers for foodgrains, substantial subsidies are still

^{1/} The unit value of exports also increased during the year, but by only 34 percent.

involved in the sale of wheat and rice. Complete avoidance of these subsidies at a time of growing unemployment and declining real wages in manufacturing was considered inequitable. Nevertheless, the Government intends to move during 1975 to reduce the deficit on the grain account which has largely offset public savings during the last two years.

Government's Response to Higher Import Prices
and Reduced International Trade

19. The Government began early in 1974 to take action to limit the growth of imports. In January, the general exemption from customs duties available for machinery imports for the export sector was eliminated. Taxes on luxury imports and a number of domestically produced commodities were raised. However, finished non-food consumer goods comprise a relatively small share of Korea's total imports (about 5 percent in 1973), so there has been limited scope for cutting down on non-essential imports. To reduce demand for petroleum products, tax rates including tariffs on private cars were raised substantially.

20. Because of slack demand, the burden of financing inventories and continued increases in costs, a growing number of industries faced serious cashflow problems in the second half of the year. This prompted a number of mid-year changes in Governmental policies. The generally tight financial policies in effect in the first half of the year were eased, credits for imported and domestic industrial inputs were increased and programs to purchase excess stocks and make available special credits to smaller businesses were begun or expanded.

21. The Government in December 1974 introduced a set of special measures to offset the sluggish demand for exports that had been experienced since mid-year. It expanded the program of export financing and provided loans for the stockpiling of essential raw materials. Credits to exporters for the purchase of imported raw materials and domestic goods were increased. On December 7, 1974, the currency was devalued by 17.5 percent to Won 485 per US dollar. The devaluation was not expected to increase exports appreciably because of the depressed state of Korea's overseas markets, but like some of the other measures, it was intended to improve the liquidity position of manufacturing enterprises. It should also improve the competitive position of import substitution industries which had been weakened during the year. But the devaluation will also result in continued inflationary pressures in 1975. Among measures taken by the Government to help the low income groups are substantial income tax relief, a 30 percent increase in salaries of Government employees and public works projects mainly in the urban areas to alleviate unemployment. The rural areas appear to have been hit less hard by domestic inflation. The terms of trade moved further in favor of the farmers during 1974 as the support price for rice was adjusted sharply upward.

22. The past year has been a period of very difficult adjustments for Korea which, by and large, have been made quickly and with realism. The Government rightly views some of its current economic problems as being

essentially short-term in nature. It assumes that a recovery in the growth rate of OECD countries will take place in the second half of 1975, in which event Korean merchandise exports could be expected to increase by 10 to 12 percent in real terms for the year as a whole. Private fixed investment may remain depressed for some months but the Government intends to stimulate business and employment through increased public sector outlays, especially for irrigation, farmland reclamation, highway construction, housing and urban waterworks. For example, about 87,000 units of housing, in addition to the 112,000 units originally planned will be undertaken in 1975, and about 334,000 new jobs are to be created in the public sector with hiring priority to be given to unemployed persons in the low income groups. In addition to increased capital expenditures, the Government proposes to continue purchasing and stockpiling surplus inventories of such major industries as textiles and plywood, for later release when the export and domestic markets are more favorable. The overall budgetary deficit is expected to be substantially larger than in 1974 and it is to be financed mainly by borrowing from the Bank of Korea and from abroad. The Government is expected to restrict the expansion of credit in low priority areas, raise interest rates and increase the reserve requirements for banks to moderate inflationary pressures. Essentially, the Government's strategy is to minimize damage to the private sector during the current period of slack demand, so that when international economic activity picks up the Korean export sector will be able to respond. Excessive business failures and loss of capacity in the private sector during the present slump would make recovery of the Korean economy slower and more costly.

23. The considerable uncertainty surrounding the international economic situation makes it difficult to assess confidently Korea's economic prospects for 1975. The Government hopes that, with its antirecessionary measures, aided by a recovery in OECD countries in the second half of 1975, GNP in real terms may increase by 6-7 percent and industrial output by as much as 14 percent. However, if the recovery in the export markets is delayed, industrial growth would be less vigorous, perhaps in the range of 10 percent, and levels of unemployment and underemployment would be even higher.

24. Even with a recovery in the OECD countries later this year, Korea will face a large current account deficit estimated at about \$1,700 billion. This estimate assumes that merchandise exports will increase by 10 percent in real terms during 1975, that real import growth will be limited to less than 9 percent, and that some marginal improvement (about 2 percent) in the terms of trade will take place. An overall import growth of around 9 percent will permit 11-12 percent growth in petroleum, food and raw materials imports and a modest increase in capital goods imports. With a slower growth of imports it would be difficult to maintain an adequate level of food supplies and to achieve the expected recovery of industrial output and exports in the second half of 1975. Finding the means to finance the large external deficit is Korea's most urgent economic challenge. The servicing of the sizeable foreign borrowing required should not pose serious

difficulties for Korea given the present low debt service ratio and continued good long-term prospects for export growth, provided that the proportion of added debt incurred on short and medium terms and at high interest rates is not too great. Korean export growth, which in real terms averaged approximately 30 percent a year during the last decade cannot be expected to be sustained at that rate in the future. Considering, however, that 90 percent of Korea's exports now, and prospectively, consists of manufactured goods, that its links with the Japanese economy remain strong, that vigorous efforts are being made to penetrate new markets, especially in the Middle East, and that progress has already been made in diversifying the industrial structure, a long-term real growth rate of exports of 10 to 12 percent seems entirely possible even if world trade in manufactures should expand comparatively slowly. With the prospect of slower growth in exports than in the past, Korea's plans already envisage greater emphasis on import substitution in agriculture, especially foodgrains, and in industry with special emphasis on increasing the domestic value added in exports. Forecasts of developments in the world economy and their impact on Korea which is so dependent upon them are especially difficult to make at this time. However, given Korea's record of successful economic management in the past 10 years and the skills, adaptability, vigor and inventiveness of its workers and entrepreneurs, one can be confident that ways will be found to surmount the problems facing the economy.

PART II - BANK GROUP OPERATIONS

25. As of February 28, 1975, Korea had received 16 Bank loans and 8 IDA credits, amounting in total to \$517.2 million in loans and \$107.0 million in credits (taking into account cancellations and the refinancing of one IDA credit in a subsequent Bank loan).

26. About one-half of the total has been for the transport sector - \$119.7 million for railways, \$101.5 million for highways and \$80 million for ports. \$130.5 million has gone to agricultural projects - \$93 million for irrigation projects, \$7 million for livestock development, \$10.5 million for the provision of medium- and long-term credit through the National Agricultural Cooperative Federation (NACF), \$7 million for seeds production and \$13.0 million for an integrated agricultural products processing project. The Korea Development Finance Corporation (KDFC) has received \$95 million in Bank loans for relending to private industry. The balance of \$97.8 million was for two education projects, a tourism project, and a secondary cities regional project.

27. IFC has made six investments in Korea and its gross commitments amounted to \$21.1 million in loans and shares. ^{1/} It made its first equity investment in KDFC, of \$0.7 million or 14 percent of KDFC's paid-in capital,

^{1/} A seventh investment in the Atlas Paper Co. amounting to \$5 million was cancelled at the request of the Company.

at the time the Bank made its first loan to KDFC. A loan of \$1.4 million to, and an equity investment of \$0.3 million in, the Honam Silk Co. was made in 1969. In 1971, IFC purchased \$0.7 million of the shares of the Korea Investment and Finance Corporation - an institution whose function is to assist in the development of the capital and money markets, a further investment of about \$0.3 million was made in 1974. In July 1973, the IFC exercised preemptive rights and purchased at par about \$400,000 equivalent of KDFC's common stock. In June 1974, IFC approved an investment of \$17.3 million in the Gold Star Company Ltd. consisting of a loan of \$16.0 million and \$1.3 million in equity. Gold Star is a leading electronics manufacturer. Investments of \$9 million in Tong Yang Nylon Co., Ltd., and about \$3.5 million in Hae Un Dae Development Co., Ltd. for hotel development and an investment of approximately \$585,000 in and a loan of \$5.0 million to the Korea Securities Finance Corporation have been approved.

28. Of total Bank and IDA lending, about \$273.9 million remained undisbursed on effective loans and credits as at February 28, 1975. The rate of disbursements has increased in recent months. Annex II contains a summary statement of Bank loans, IDA credits, and IFC investments as of that date and notes on the execution of ongoing projects. As indicated in the notes, progress on project implementation is generally satisfactory, although difficulties have been encountered with some projects and most seriously with the Pyongtaek-Kumgang and Yong San Gang Irrigation Projects (Loan 600-KO and Loan 705/Credit 283, respectively).

29. The Bank's program for FY75 includes four operations in addition to the proposed loan: the secondary cities regional project, a first loan to the Korea Development Bank (KDB), a program loan and a third education project. All of these have been approved.

30. The emphasis which the Government places on agricultural and rural development will be reflected in the programs for the succeeding years FY76 and FY77. The report of the agriculture sector mission (R73-287, dated December 19, 1973) provided the basis for developing additional high priority agricultural projects. A second livestock project, the second stage of the Yong San Gang Irrigation Project, the Okseo irrigation and regional development project and the Miho Cheon and Naeseong-Cheon watershed development projects have already been identified and are under preparation, a rural infrastructure project and follow-on projects in agricultural credit and agricultural products processing are also being considered.

31. Another major emphasis in Korea's current plans is the development of industries such as steel, shipbuilding and machine tools. Hitherto, the Bank's lending for industry to Korea has been solely through the KDFC. A loan for industrial development through a second financial intermediary, the Korea Development Bank (KDB) was approved on March 20, 1975. Also under

consideration is a loan to the Medium Industry Bank which provides financing to smaller businesses and a fifth loan to KDFC.

32. The development of the industrial and agricultural sectors and of exports will require concurrent infrastructural development. Although the transport sector will be given relatively less emphasis than in the past, the investments required are large, and thus there is considerable support for this sector in the proposed program.

33. The Government is intensifying its efforts to prepare projects suitable for external official financing in the fields of infrastructure, agriculture and regional development. The foreign exchange component of such projects is low, partly because they consist largely of civil works, and Korea's construction industry is efficient and well organized and wins an overwhelming proportion of contracts put out to international competition; its dependence on imports is expected to lessen in the future. Moreover, the country's capacity to meet its requirements of machinery and equipment from domestic sources is also increasing. Korea's need for official aid therefore cannot be met if financing is confined to the foreign exchange costs of projects. For this reason the Bank should continue to be prepared to finance, in appropriate cases, a portion of local costs.

PART III - THE TRANSPORT SECTOR

The Bank Group's Role in the Sector's Development

34. The evolution of the transport sector in Korea is seen most clearly when viewed in the context of the remarkable growth and structural change experienced by the economy during recent years. Manufacturing output grew at an annual average rate of 18 percent in the 1960-73 period and the export of manufacturers at an even faster rate. This rapid expansion of production and exports placed a severe strain on the transport sector, mainly because relatively modest amounts were invested in the enlargement of its capacity during the First Development Plan Period (1962-1966).

35. During the Second Plan (1967-71) period, the demand for transport facilities increased at an even faster pace than many of the other indicators of economic growth. Domestic passenger traffic (in terms of passenger kilometers) increased at the annual average rate of 11 percent and freight traffic (in ton-kilometers) at 19 percent; international traffic handled through the ports rose by 22 percent a year. The Government realized that the further growth of the dynamic private sector could be seriously impeded by the growing bottlenecks in transport infrastructure. Accordingly, the allocation for investment in transport was raised from 17 percent of the Government's capital expenditure in the First Plan period to 27 percent for the Second Plan. During this period, over 240 billion Won was committed for the improvement of the railways, the construction of new and maintenance of existing roads and the expansion of port and airport capacity. The demand for transport services has continued to grow during the first three years

of the Third Plan Period (1972-1976) during the course of which the Government intends to invest about 490 billion Won roughly \$1,000 million in transport infrastructure or just over a quarter of total governmental capital expenditure proposed in the Plan.

36. The Bank Group's association with the Government's efforts to modernize and expand the transport sector in Korea dates back to 1962, when a \$14.0 million Credit was made to help finance the First Railway Project. The railroad system, which had been rehabilitated following the Korean War, was at that time the only means for the large-scale movement of goods and passengers since the country had a very small network of paved roads and few motor vehicles. The rapid economic progress of the succeeding years called for a wider range of transport services. In 1965, the Bank made a technical assistance grant for a comprehensive survey of land transportation modes, which was carried out by consultants. Their report, which was completed in late 1966, concluded that the railways could be expected to handle most of the country's freight traffic, of which a large proportion consisted of moving bulk commodities over relatively long distances and that since the road-system was inadequate the Government should emphasize highway improvement in its development programs. It suggested that an organization to coordinate transport policy was needed. In 1968, the Association extended a \$3.5 million technical assistance credit (Cr. S-4KO) to help finance feasibility and detailed engineering studies to improve the highway network and a study on transport coordination. A UNDP-financed port development study was initiated in 1971 with the Bank acting as the Executing Agency. The UNDP study recommended an investment plan for Korea's 17 first-class ports.

37. The Bank Group's lending operations have been directed towards assisting the program of investments which stemmed from a review of the recommendations of the various studies referred to in the previous paragraph. The Korean National Railroad (KNR) has continued to receive Bank Group support to improve and expand its services. To date, KNR has received about \$120 million in the form of loans and credits to help finance four projects. In June 1973, the Bank made an \$80 million loan to support the expansion of two ports -- Busan and Mukho. Following the studies financed from the proceeds of the technical assistance Credit S-4KO, a Bank loan (769-KO) of \$54.5 million was made in 1971 to finance the construction of about 400 kilometers of national highway feasibility and detailed engineering studies (covering 900 additional kilometers of priority roads), a highway maintenance study and the purchase of equipment and spare parts for a pilot highway maintenance program. The studies and maintenance program led to the formulation of the Second Highway Project for which a loan of \$47.0 million (956-KO) was approved in early 1974; it is progressing satisfactorily.

38. The Government has made efforts to improve transport coordination. Following extensive discussions between the Government and the Bank, a Transportation Planning Office (TPO) was set up under the jurisdiction of the Ministry of Transportation (MOT) in 1970. Its main functions are to collect data, and assist in the assessment of major investment proposals.

TPO is controlled by, and reports to, a Transport Coordination Ministers Conference (TCMC) consisting of eight cabinet members whose ministries are most concerned with transport matters. TPO's work is supervised by a Transport Coordination Working Group (TCWG--a Civil Service Committee on which the same ministries are represented). TPO encountered a series of teething troubles, especially in recruiting adequately qualified staff. Certain measures designed to increase TPO's effectiveness were discussed during the negotiations for the Second Highway Project in November 1973 and were to have been implemented during the course of 1974. However, little progress was made largely because the Government had not reached firm conclusions about TPO's functions. The Government is currently reviewing TPO's work program for the next three years with a view to taking measures to make it more effective. TPO's future role was discussed further during negotiations for the proposed project in the light of the findings of recent supervision missions and the Government's plans for strengthening it. The Government has agreed, as a condition of effectiveness of the proposed loan, to submit to the Bank its views on TPO's future role and a time-phased plan to take the steps necessary to perform it (cf. Section 6.01 of the draft Loan Agreement) and to implement the measures to be agreed upon with the Bank within one year of the submission of the time-phased plan (cf. Section 3.13 of the draft Loan Agreement).

The Role of the Railways

39. The progress made towards evolving a multi-modal transport system in Korea has not diminished the importance of the railway network in absolute terms, although the virtual monopoly it enjoyed a decade ago has been ended by the investments in highways and ports mentioned above. Over half of the country's freight traffic (in terms of ton-km) was handled by KNR in 1973; the fact that over three-quarters of this consisted of bulk commodities which are especially suitable for rail transportation indicate the crucial role it can be expected to play in the future. Further, despite increasing competition in recent years from the well-organized highway-bus industry, KNR carries nearly a quarter of commercial passenger traffic (in terms of passenger-km). The competition offered by the highways, in carrying both freight and passengers, is likely to lessen on account of the recent increase in the prices of petroleum products because the costs of operating trucks and buses will be higher since fuel costs form a larger proportion of operating costs of road vehicles than of rail transport. Increased exploitation of Korea's anthracite deposits, which are located in the northeastern part of the country, will add to the importance of the railways since they represent the most economical means of transporting coal (The movement of coal constituted about 37 percent of KNR's freight traffic in 1973).

40. The system which KNR operates is the most "mature" segment of Korea's transport sector. The severe damage sustained during the Korean War was repaired with the help of a large USAID financed rehabilitation program during the fifties. Since then, a continuing modernization and expansion program has been financed, in part, by borrowing totalling over \$350 million. As stated in paragraph 37, the Bank Group has helped finance four projects through loans and credits totalling about \$120 million. The

First Railway Project (Credit 25-K0) was approved in 1962 and consisted of the laying of new line, the procurement of rolling stock, and technical assistance for the establishment of a modern accounting and statistical system. The Second Railway Project (Credit 110-K0) was approved in 1967 and comprised the purchase of rolling stock and locomotives, the expansion of line capacity and technical assistance aimed at increasing KNR's operational efficiency. Brief notes on the Third and Fourth Railway Projects (Loan 669/Credit 183-K0 and Loan 863-K0), are given in Annex II; the progress on these projects is generally satisfactory although some procurement difficulties have been encountered. The Fourth Project was reviewed by the Korean authorities and a Bank supervision mission in early 1974 and in order to compensate for the sizeable cost increases of the previous two years, it was decided to defer some of the less urgent investments originally included in it. Expenditures amounting to \$7.5 million on two urgent items included in the Fourth Railway Project, viz. track maintenance equipment and plant and machinery for workshops will be financed from the proceeds of the proposed loan.

PART IV - THE PROJECT

41. The proposed project consists of the investments which KNR intends to make during the last two years of the Third Plan (1972-76) period (except for expenditures on items being financed as part of the Third and Fourth Railway Projects); it was appraised by a Bank mission in June/July 1974. A report based on the findings of the mission (No. 610a-KOA dated March 24, 1975) is being circulated separately. Negotiations were held in Washington from February 24, 1975 to March 11, 1975 with a Government team led by Mr. Dong Hwa Lee, KNR's Director General.

42. A Loan and Project Summary is attached as Annex III. The major components of the proposed project are summarized below:

- (a) the completion of the electrification of industrial and suburban (Seoul) lines;
- (b) the completion of centralized traffic control in Seoul;
- (c) continuation of double-tracking of the Ho Nam line and partial doubling of the Tae Baeg line;
- (d) the acquisition of 50 diesel and 10 electric locomotives;
- (e) the improvement of marshalling yards and bridge strengthening;
- (f) way and structure renewal and improvement;

- (g) the acquisition of spare parts for the maintenance of the fleet of locomotives and wheel sets for passenger and freight cars;
- (h) the purchase of 150 passenger and 2,000 1/ freight cars and components for heating cars;
- (i) plant and machinery for workshops and running sheds; and
- (j) technical assistance to finance the training of KNR staff and the services of an adviser who would assist in the execution of a motive power and rolling stock maintenance program.

43. The total project cost is estimated at \$292 million equivalent of which the foreign exchange component is expected to amount to \$185 million equivalent (nearly 63 percent). The proposed loan of \$100 million would cover the foreign exchange costs of the project items listed in subparagraphs 42 (e) through (j) above (cf. paragraph 52 below); the remainder of the foreign expenditure will be met through borrowing from other foreign sources as indicated in the Financing Plan which forms part of Annex III. The local currency required (Won 52 billion; \$107 million equivalent) will be provided by the Government.

KNR: Staff and Operations

44. KNR is a quasi-autonomous Government agency. It comes under the jurisdiction of the Ministry of Transportation but is allowed to maintain its own accounts; public expenditures on it are separately identified in the national budget. Ultimate control over its staffing, financial and operational policies is vested in the Government. KNR's management is generally satisfactory. The productivity of its staff is comparable in terms of traffic units per employee (roughly 470,000 in 1973) with that of Taiwan (462,000) and is better than that of the U.K. (248,000) and Italy (263,000). The higher pay-scales in the private sector have made it difficult to retain staff. KNR hopes to meet its requirements of qualified personnel in disciplines such as accounting, maintenance of rolling stock and operation of microwave equipment by the improvement and expansion of its in-service training facilities. Some \$100,000 of the proceeds of the proposed loan have been earmarked to help finance the cost of overseas training in the maintenance of equipment for selected members of KNR staff.

45. The analysis of KNR's operating statistics for recent years reveals that KNR has made good use of its rolling stock and motive power in

1/ 500 of the freight cars, now coming into service are being financed by the Government.

handling rapidly rising volumes of traffic. This achievement has, however, been gained partly at the expense of foregoing the regular maintenance prescribed for passenger and freight cars and locomotives. This, in turn, has resulted in breakdowns and idling of capacity with increasing frequency over the last year or so. KNR is aware of the necessity of remedying this situation by the introduction of a systematic maintenance schedule along the lines suggested by the consultants (Touche Ross and Co.) whose services were provided under the Third Railway Project. The timing of the preparation of a detailed plan of action based on the recommendations of the Touche Ross study was discussed and agreed upon during negotiations (cf. Section 3.07 of the draft Loan Agreement).

46. KNR and the Bank believe that the execution of the initial phase of the plan of action would be greatly facilitated by the advice of an expert in locomotive and rolling stock maintenance. Accordingly, funds amounting to some \$200,000 will be provided under the proposed loan to finance the services of a suitably qualified technical advisor for a two-year period. Also, about \$2.6 million of the proceeds of the loan will be expended on modernization of plant and machinery for workshops and running sheds. The lack of funds to purchase spare parts has also contributed to KNR's poor maintenance of its motive power and rolling stock fleet. The problem is closely related to the deterioration of its financial situation in recent years (which is discussed in paragraphs 47 to 51 below). Some \$8.7 million of the proceeds of the proposed loan have been allocated for the purchase of urgently needed spare parts for diesel locomotives and track maintenance machines to help alleviate this difficulty in the short run. Since the spares are to be used for the existing locomotive fleet and track maintenance units, it is intended to purchase them on a negotiated basis from authorized suppliers in the interest of increasing the realization of the benefits of past investment in KNR's locomotive fleet (part of which was procured under the Third and Fourth Railway Projects in accordance with the Bank's procedures for international competitive bidding). The Government has provided an assurance to the effect that KNR will receive on an annual basis, the local or foreign currency it requires to purchase urgently needed spares (cf. Section 3.08 of the draft Loan Agreement).

KNR's Finances

47. KNR operated on a profitable basis till 1970. Since that year, its revenues have been insufficient to meet its operating expenses and amortization payments. Its net losses have risen from Won 4.6 billion (\$11.5 million) in 1971 to Won 7.1 billion (\$17.8 million) in 1973. The situation has been caused largely by the following factors: (a) the tariff increases permitted by the Government over the last few years have been inadequate, both in terms of frequency and magnitude, to compensate for inflation. During the 1968-73 period freight rates and passenger fares were increased only once (by 20 percent in 1972 and 32 percent in 1969 respectively); the wholesale price index rose at an average rate of 9 percent per annum during this period; (b) KNR has had to rely on financing its capital expenditures in recent years almost exclusively through borrowing. Its debt service, which amounted to about Won 2.8 billion (\$7.0 million) in 1969, and represented about 29 percent of cash generated in that

year, had risen to Won 14.5 billion (\$36.2 million) and was over 60 percent higher than the cash generated in 1973. 1/

48. KNR's growing financial difficulties were identified during the appraisal of the Fourth Railway Project in late 1971. The opening of the Seoul-Busan Expressway in 1970 resulted in a substantial diversion of passenger traffic to buses. This development was particularly damaging to KNR's finances since it had been relying on passenger revenues to offset inadequate freight revenues. The re-structuring of tariffs and raising of freight rates, as suggested in a traffic costing study carried out by consultants under financed the Second Railway Project, was discussed during negotiations for the Fourth Railway Project. It was agreed that the Government would raise railway tariffs at specified times over the 1974-78 period and take other appropriate measures to meet certain financial targets including the achievement of a rate of return (on net fixed assets in operation) of 2 percent in 1975, 3 percent in 1976 and 5 percent in 1978. Further, KNR's overall financial position was to be reviewed each year in consultation with the Bank to determine and agree upon a course of action to ensure satisfactory progress towards meeting the objectives of the rate of return covenant (Section 4.07 of the Fourth Railway Project Loan Agreement).

49. The Government, in compliance with these obligations, has increased railway tariffs by appreciable amounts in 1974. 2/ However, the effect of these moves has been nullified to a large extent by the large price increases of the last two years. The urgency of mounting a major maintenance program coupled with the large expenditures which will have to be made in order to enable KNR to fulfill its economic role (cf. paragraph 39 above) makes it imperative for the Government to take further steps to reduce costs and to improve its earning capacity.

50. Projections made in connection with the appraisal of the proposed project indicate that even on the assumption that fairly sizeable tariff increases are implemented during the next few years, 3/ KNR will not have a

1/ Cash generated = net operating revenue + depreciation - net non-operating expenses (cf Annex III).

2/ Freight rates were raised by 15 percent and passenger fares by 25 percent in January/February 1974; further increases which raised KNR's revenues by about 25 percent were announced in December 1974.

3/ Tariff increase as follows:

<u>Year</u>	<u>Passenger Fares</u>	<u>Freight Rates</u>
1976	20 percent	25 percent
1977	10 percent	20 percent
1978	10 percent	10 percent
1979	-	

positive net revenue until 1978 at the earliest (cf. the KNR's 1969-79 Income Statement, attached in Annex III). A cash-flow analysis (also attached in Annex III) shows that KNR's mounting debt-service burden over the next few years will also pose serious problems, even if new borrowing is restricted to cover only the foreign exchange capital expenditures from 1975 through 1979.

51. KNR's planned investments for 1975-76 are of high priority given the crucial nature of the services it provides. KNR also envisages incurring sizeable capital expenditures over the 1977-79 period. Therefore, the Government has decided to strengthen KNR financially. During negotiations, the Government reaffirmed that it realized the importance of adopting measures to enable KNR to generate revenue sufficient to cover its operating expenses, meet its debt service obligations in full and make some contribution towards capital investment. The Government intends to formulate a financial recovery plan with the objective of enabling KNR to meet the financial targets mentioned above no later than its fiscal year 1980 (cf. Section 4.06 of the draft Loan Agreement). In the interim, in order to provide KNR with the funds necessary to finance its medium term financial expenditures, especially those related to 1975-76 Investment Plan, it has agreed to provide funds to cover all of KNR's debt service obligations including those contracted in the past. This arrangement, which is expected to strengthen KNR's financial position markedly, will continue until the implementation of a financial recovery plan acceptable to the Bank (cf. Section 3.02 of the draft Loan Agreement and the draft Supplemental Letter on "KNR's Financial Situation"). Further, the Government has also agreed that KNR will consult with the Bank to establish the economic, technical and financial justification of major capital expenditure to be undertaken during the 1977-1979 period prior to any commitment being made (cf. Sections 3.11 and 3.12 of the draft Loan Agreement).

Procurement

52. All items to be procured under the proposed loan (except the spare parts referred to in paragraph 46 above) will be subject to international competitive bidding in accordance with the Bank's Guidelines. The procurement of spare parts, needed to build up a stock sufficient for the existing track maintenance machines and those for adequate regular maintenance of diesel locomotives (cf. paragraph 45 above), and involving expenditures of about \$8.7 million will be negotiated with original suppliers in consultation with the Bank. In bid evaluation Korean manufacturers of equipment will be allowed a preferential margin of 15 percent of the c.i.f. cost of competing imports or the relevant prevailing level of customs duties, whichever is the lower. Should local bids, in response to international tenders for bridge girders, passenger and freight cars, wheel sets and portal cranes, be successful, local cost financing from the proceeds of the proposed loan to the extent of the equivalent of \$27 million would be involved.

Disbursement

53. Disbursement would be made on the basis of 100 percent of: the c.i.f. cost of imported equipment and materials; the ex-factory cost of

locally manufactured equipment and materials if local bidders are successful; and the foreign exchange costs of technical assistance. A disbursement schedule is given in Annex III.

Benefits and Justification

54. KNR's 1975-76 Investment Plan has two major elements:

- (a) investments to increase the capacity for coal transport; and
- (b) other investments, which cover track renewals and bridge strengthening, track equipment, signalling and telecommunications, purchase of motive power, freight cars and passenger cars, improvement of workshops and sheds, and some yard and line capacity increases.

55. Investments related to coal transport are intended to enable KNR to carry increasing long-distance coal traffic between the production points in the northeastern part of Korea and the consumption points. The railway is the most efficient means of transporting coal since there are no economically feasible alternatives. In 1973, KNR carried 13.6 million tons and 3.2 billion ton-km of coal, and by 1976, this traffic will reach 17.6 million tons and 4.1 billion ton-km (against the original 1972 estimate of 13.8 million tons and 3.2 billion ton-km). The substantial increase in estimated coal traffic has resulted from the increases in oil prices, which have affected Korea's balance of payments situation adversely. In 1973, petroleum imports, upon which the bulk of the country's energy sources now depends, were estimated at about 110 million barrels, at a cost of \$330 million equivalent (based on c.i.f. prices). In 1974, the total cost of crude oil imports were expected to amount to \$1.2 billion; this increase in the oil import bill is equivalent to 80 percent of the estimated current account deficit for 1974.

56. The Government has taken and is taking measures to conserve energy in order to save foreign exchange. It is also encouraging coal production as an alternative to petroleum. Investments amounting to \$180 million in coal mining, storage and transport facilities (amounting to \$99 million) are planned for 1975 and 1976. It is expected that this will increase coal production by 2.6 million tons and 3 million tons in 1975 and 1976 respectively. Since a ton of coal would substitute for about 4 barrels of oil if the c.i.f. price of crude oil is \$10.20 per barrel, savings of \$109 million and \$126 million in foreign exchange would result in 1975 and 1976 respectively. Taking into account coal production costs, the benefit/cost ratio at present prices would be of the order of 3.3:1 and the return on the investment in the first year would be over 50 percent.

57. The other investments under the proposed project which are estimated to cost \$238 million are aimed at increasing capacity largely through the purchase of freight cars, passenger coaches and motive power and improving signalling, marshalling yard and line capacity. These are designed to ensure the efficient operation of KNR and to increase its capacity to handle the growing traffic, limiting to a minimum increases in operating costs and improving the quality of service and safety. These investments will result in savings in operating costs and will prevent the diversion of traffic to other more costly modes. The economic rate of return on these investments is estimated to be about 29 percent.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

58. The draft Loan Agreement between the Republic of Korea and the Bank, the Report of the Committee provided for in Article II, Section 4 (iii) of the Articles of Agreement, the text of a Resolution approving the proposed loan and the draft Supplemental Letter on KNR's financial situation are being distributed to the Executive Directors separately. The draft Loan Agreement follows the general pattern of loan agreements relating to railway projects.

59. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

PART VI - RECOMMENDATION

60. I recommend that the Executive Directors approve the proposed loan.

Robert S. McNamara
President

Attachments
March 26, 1975

COUNTRY DATA - KOREA

AREA
98,477 km²POPULATION
32.4 million (mid-1972)DENSITY
725 Per km² of arable land

SOCIAL INDICATORS

	Korea		Reference Countries		
	1960	1970	Thailand 1970	Turkey 1970	Japan* 1970
GNP PER CAPITA US\$ (ATLAS BASIS) /1	140 /a	310 /b	220 /b	370 /b	2,320 /b
DEMOGRAPHIC					
Crude birth rate (per thousand)	40 /c	28	43 /d	38 /d,e	19.2 /f
Crude death rate (per thousand)	11 /c	8	10 /d	13 /d,e	6.6 /f
Infant mortality rate (per thousand live births)	..	..	80-90	145 /g	12.4 /f
Life expectancy at birth (years)	56	65	59	55 /h	72
Gross reproduction rate /2	3.1 /b	2.5	3.2	2.6 /a,h	1.0
Population growth rate /3	3.0 /a,i	2.2 /j	3.1 /i	2.5 /i	1.1 /i
Population growth rate - urban	7 /i	6 /j	5 /k	4.5 /i	3 /m
Age structure (percent)					
0-14	44	40 /b	45 /e	42	24.0 /f
15-64	53	57 /b	52 /e	54	68.8 /f
65 and over	3	3 /b	3 /e	4	7.2 /f
Age dependency ratio /4	0.9	0.8	0.9	0.8	0.4
Economic dependency ratio /4	1.6	1.4	1.1	1.1	0.6
Urban population as percent of total	28 /i	41 /j	25 /k	38 /b,l	72 /m
Family planning: No. of acceptors cumulative (thous.)	..	..	490	484 /o,p	..
No. of users (% of married women)	..	..	10	8.2 /g	..
EMPLOYMENT					
Total labor force (thousands)	7,500	10,500 /b	16,500	14,500 /r	53,000
Percentage employed in agriculture	66	46 /b	81	67	19.1
Percentage unemployed	9	4.5 /b	1	4	1.4
INCOME DISTRIBUTION					
Percent of national income received by highest 5%	17 /a,ai	15 /e,t	17 /t,u	32 /a,t,v	..
Percent of national income received by highest 20%	42 /a,ai	37 /e,t	46 /t,u	60 /a,t,v	..
Percent of national income received by lowest 20%	7 /a,ai	10 /e,t	7 /t,u	3 /a,t,v	..
Percent of national income received by lowest 40%	20 /a,ai	24 /e,t	17 /t,u	10 /a,t,v	..
DISTRIBUTION OF LAND OWNERSHIP					
% owned by top 10% of owners	27	28	..	53	..
% owned by smallest 10% of owners	3	2	..	0.9	..
HEALTH AND NUTRITION					
Population per physician	3,000 /c,w	2,210 /w	7,970	2,220	880
Population per nursing person	..	1,760 /w	6,650	1,880 /x	240
Population per hospital bed	2,600 /c	1,920	850	490	80
Per capita calorie supply as % of requirements /5	85	103	105	110	106
Per capita protein supply, total (grams per day) /b	53	65	52	78	76
Of which, animal and pulse	13 /c	19 /v,x	17 /aa	22 /aa	45
Death rate 1-4 years /2	..	..	..	15 /h	1.0 /f
EDUCATION					
Adjusted /8 primary school enrollment ratio	96	104	80 /g	111	100
Adjusted /8 secondary school enrollment ratio	27	41	13 /g	28	90
Years of schooling provided, first and second level	12	12	12	11	12
Vocational enrollment as % of sec. school enrollment	14	15 /f	12 /y,ab	14	20
Adult literacy rate %	..	91 /ac,ak	70 /f,t	55 /ad	99 /r,y
HOUSING					
Average No. of persons per room (urban)	2.8 /ae	2.7	..	1.9	1.0 /e
Percent of occupied units without piped water	88 /af	80 /af	..	64 /ag	5 /a,ag
Access to electricity (as % of total population)	28	50	17	41 /ah	..
Percent of rural population connected to electricity	12	30	13	18 /ah	..
CONSUMPTION					
Radio receivers per 1000 population	32	128 /f	83 /b	107 /b	658 /b
Passenger cars per 1000 population	0.4	2 /b	7 /f	4	117 /b
Electric power consumption (kwh p.c.)	71	392 /b	164 /b	304 /b	3,909 /b
Newspaper consumption p.c. kg per year	1.8	3.7 /b	1.5 /b	2.2 /b	19.6 /b

Notes: Figures refer either to the latest periods or to the latest years. Latest periods refer in principle to the years 1956-60 or 1966-70; the latest years in principle to 1960 and 1970.

/1 The Per Capita GNP estimate is at market prices for years other than 1960, calculated by the same conversion technique as the 1972 World Bank Atlas.

/2 Average number of daughters per woman of reproductive age.

/3 Population growth rates are for the decades ending in 1960 and 1970.

/4 Ratio of population under 15 and 65 and over to population of ages 15-64 for age dependency ratio and to labor force of ages 15-64 for economic dependency ratio.

/5 FAO reference standards represent physiological requirements for normal activity and health, taking

account of environmental temperature, body weights, and distribution by age and sex of national populations. Protein standards (requirements) for all countries as established by USDA Economic Research Service provide for a minimum allowance of 60 grams of total protein per day, and 20 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are somewhat lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.

/7 Some studies have suggested that crude death rates of children ages 1 through 4 may be used as a first approximation index of malnutrition.

/8 Percentage enrolled of corresponding population of school age as defined for each country.

/a Computed by applying to the 1970 figure the growth rate of GNP per capita in real terms from 1960 to 1970; /b 1972; 1962; /c 1965-70 UN estimate; /d Derived from Sample Survey estimates (240,000 persons), excluding 17 eastern provinces /e 1971; /f 1968; /g 1965-67; /h 1960-72; /i Seoul city and municipalities of 5,000 or more

inhabitants; /j Over 10,000 population; /k Administrative centers of provinces and districts ("Vilayet" and "Kaza" centers); /l Cities ("Shi") having 30,000 or more inhabitants; /m 1950-55; /n 1964-June 1974; /o 86 percent being IUDs; /p Employed labor force; /q 15 years and over; /r Wage and salary income of households;

/s Households; /t Urban only; /v Disposable income; /w Number of the register not all working in the country; /x Including assistant nurses and midwives; /y 1969; /z Estimate; /aa 1964-65; /ab Data on vocational education refer to public schools and includes technical education at the post-secondary level; /ac Definition unknown;

/ad Persons six years old and over who tell the census takers that they can read and write; /ae Data refer to households /af Water piped inside; /ag Inside or outside; /ah Percentage of dwellings with electric lighting; /ai 1964;

/aj 1955-60; /ak Ten years and over.

* Japan has been selected as an objective country due to the similarity of the present Korean economic structure to that of Japan in the mid-fifties (with the same principal resource base, i.e., efficient, industrious, cheap labor and heavy reliance on imported raw materials). Moreover, agriculture, transport, and other sectors of the economy have similar characteristics. Korea also has, in its Long-Term Plan (1972-81), a pattern of industrial development which is not very different from the one Japan pursued with great success in the sixties.

KOREA

ECONOMIC DEVELOPMENT DATA SHEET
(amounts in millions of U.S. dollars)

	Actual			Projected			1960-	1965-	1970-	1973-			
	1960	1965	1970	1973	1975	1979	1965	1970	1975	1979	1960	1970	1979
NATIONAL ACCOUNTS													
	3-Year Averages at 1967-69 Prices & Exchange Rates						Average Annual Growth Rate			As Percent of GDY			
Gross Domestic Product	3,167.6	4,343.0	7,252.0	9,760.8	11,766.2	16,306.2	6.5	10.8	10.2	8.9	100.2	100.1	101.6
Gains from Terms of Trade (+)	-6.6	-24.0	-8.6	-162.2	-318.7	-251.4	..	..	-	..	-0.2	-0.1	-1.6
Gross Domestic Income	3,161.0	4,319.0	7,243.4	9,618.6	11,447.5	16,054.8	6.5	10.9	9.6	8.9	100.0	100.0	100.0
Imports (incl. NFS)	337.3	548.4	2,142.5	2,766.7	3,511.7	4,499.0	10.2	31.2	10.4	8.5	10.7	29.6	28.0
Exports (import capacity)	113.1	302.5	1,301.7	2,536.0	3,395.0	4,566.0	21.7	34.0	21.0	10.3	3.6	18.0	28.0
Resource Gap	-224.2	-245.9	-840.8	-230.7	-116.7	67.0	1.1	29.0	-35.0	-	-7.1	-11.6	0.4
Consumption Expenditures	3,075.5	3,862.3	5,926.2	7,726.9	9,242.5	12,355.0	4.6	9.0	9.3	8.2	97.3	81.8	77.0
Investment (incl. stocks)	309.7	702.6	2,158.0	2,190.5	2,321.3	3,633.3	17.8	25.5	1.5	8.8	9.8	29.8	22.6
Domestic Savings	85.5	456.7	1,317.2	1,959.8	2,204.8	3,700.3	40.0	23.5	10.8	11.2	2.7	18.7	23.0
National Savings ^{a/}	329.9	663.2	1,503.1	2,024.8	2,184.8	3,467.5	15.0	17.7	7.8	9.4	10.4	20.8	21.6
MERCHANDISE TRADE													
	Annual Data at Current Prices						As Percent of Total						
Imports													
Capital Goods	70.0	73.0	590.0	1,148.0	1,527.0	2,470.0	0.8	51.4	21.0	13.6	16.3	29.8	24.2
Intermediate Goods (excl. fuels)	90.0	110.7	404.0	1,477.9	2,026.0	3,060.0	4.1	29.5	38.0	12.9	21.0	20.4	29.9
Fuels and Related Materials	31.0	31.0	136.0	387.0	1,307.0	2,138.0	0.0	34.5	57.0	33.0	7.2	6.8	20.9
of which: Petroleum	28.0	29.0	133.0	380.0	1,287.0	2,096.0	0.6	35.5	57.0	33.0	(6.5)	(6.7)	(20.5)
Consumption Goods	238.0	263.0	852.0	1,228.0	1,650.0	2,560.0	0.4	28.7	14.2	13.1	55.5	43.0	25.0
Total Merchandise Imports (cif)	429.0 ^{a/}	457.0	1,982.0	4,240.9	6,510.0	10,228.0	1.3	34.4	26.7	15.8	100.0	100.0	100.0
Exports													
Primary Products (excl. fuels)	37.0	64.0	131.0	314.0	337.0	362.4	11.6	15.4	20.6	2.4	67.3	14.9	4.4
Fuels and Related Materials	3.0	2.0	9.0	55.0	43.0	70.0	-7.8	35.1	36.7	4.1	5.4	1.0	0.8
of which: Petroleum	-	-	-	-	-	-	-	-	-	-	-	-	-
Manufactured Goods	15.0	109.0	738.0	2,843.0	4,336.0	7,878.6	48.7	46.8	42.5	18.5	27.3	84.1	94.8
Total Merchandise Exports (fob)	55.0	175.0	878.0	3,212.0	4,716.0	8,311.0	26.2	38.6	40.0	17.2	100.0	100.0	100.0
Tourism and Border Trade	..	5.0	34.0	234.0	290.0	330.0	..	46.5	50.4	5.1	..	..	..
Merchandise Trade Indices													
	Average 1967-69 = 100												
Export Price Index	89.2	87.5	100.0	150.0	169.0	215.0	-0.5	2.7	8.5	6.2			
Import Price Index	104.0	103.0	100.0	153.0	195.0	237.0	-0.5	-0.5	8.9	7.6			
Terms of Trade Index	85.8	84.9	100.0	98.0	86.7	90.7	-0.5	3.4	-3.0	-1.3			
Export Volume Index	13.6	36.9	153.6	324.3	406.4	562.9	22.0	33.0	16.1	9.0			
VALUE ADDED BY SECTOR													
	Annual Data at 1967-69 Prices & Exchange Rates												
Agriculture	1,303.4	1,684.0	2,025.2	2,226.5	2,431.4	2,832.3	5.3	3.8	3.7	4.1	45.0	31.0	20.0
Industry and Mining	311.2	540.0	1,318.5	2,241.6	3,000.7	4,556.9	11.7	19.7	17.8	12.5	10.0	20.0	33.0
Service	1,306.1	1,715.0	3,182.0	4,269.1	4,873.9	6,632.0	5.6	13.0	9.1	9.3	45.0	49.0	47.0
Total	2,920.7	3,939.0	6,505.7	8,717.2	10,306.0	14,021.2	6.1	10.5	9.6	10.0	100.0	100.0	100.0
PUBLIC FINANCE													
(Central Government)													
Current Receipts	388.4	394.6	1,212.1	1,202.4	1,695.4	2,990.3	0.3	25.2	7.0	16.4	13.0	19.0	18.0
Current Expenditures	421.2	376.2	883.2	1,010.0	1,295.5	2,491.9	-2.4	18.8	7.9	16.3	14.0	14.0	15.0
Budgetary Savings	-32.8	20.4	328.9	192.4	399.9	498.4	..	73.0	3.9	17.2	-1.0	5.0	3.0
Other Public Sector Savings	16.8	49.7	168.5	..	..	..	24.0	27.0	..	..	1.0	3.0	2.0
Public Sector Investment	108.2	165.8	472.6	364.0	571.0	747.6	8.9	23.2	3.9	12.7	4.0	7.0	4.0
CURRENT EXPENDITURE DETAILS													
(As % Total Current Expend.)													
	Actual				Est.		DETAIL ON			At 1967-69 Prices		As Percent of Total	
	1965	1970	1971	1972	1973		PUBLIC SECTOR ^{b/}			Plan	Plan	Plan	Plan
Education	15.0	15.0	17.0	16.0	16.0		INVESTMENT PROGRAM			(1967-71)	(1973-81)	(1967-71)	(1973-81)
Other Social Services	10.0	14.0	11.0	14.0	15.0		Social Sectors ^{a/}			317	5,116	29.0	42.0
Agriculture	10.0	9.0	8.0	5.0	7.0		Agriculture			64	2,835	6.0	23.0
Other Economic Services	19.0	16.0	18.0	20.0	18.0		Mining and Manufacturing			92	1,064	8.0	9.0
Administration and Defense	36.0	37.0	28.0	27.0	29.0		Power			26	*	2.0	*
Other	10.0	9.0	18.0	18.0	17.0		Transport and Communications			479	3,167	43.0	26.0
Total Current Expenditures	100.0	100.0	100.0	100.0	100.0		Other			129	51	12.0	..
							Total			1,107	12,233	100.0	100.0
SELECTED INDICATORS													
	1960-	1965-	1970-	1973-			FINANCING ^{c/}						
Average ICOR	2.2	2.6	2.8	2.8			Public Savings			1,481	..	69.0	..
Import Elasticity ^{d/}	1.6	2.8	1.1	1.0			Program Aid			485	..	22.0	..
Marginal Domestic Savings Rate	0.30	0.30	0.22	0.29 ^{e/}			Foreign Borrowing (Net)			61	..	3.0	..
Marginal National Savings Rate	0.29	0.30	0.18	0.25 ^{e/}			Domestic Borrowing (Net)			122	..	6.0	..
							Total			2,149	..	100.0	..
LABOR FORCE AND OUTPUT PER WORKER													
	Total Labor Force						Value Added Per Worker (1967-69 Prices & Exch. Rates)						
	In Millions		% of Total		1960-70		In U.S. Dollars		% of Average		1960-70		
	1960	1970	1960	1970	Growth Rate		1960	1970	1960	1970	Growth Rate		
Agriculture	4.6	4.8	66	51	0.4		282	419	68	62	4.0		
Industry	0.5	1.3	7	13	10.1		563	986	135	145	5.8		
Services	1.9	3.5	27	36	6.1		701	930	169	137	2.8		
Total	7.0	9.6	100	100	3.1		416	682	100	100	5.8		

a/ not available
 .. not applicable
 * staff estimate
 * included in Social Sectors

b/ 1962
 b/ Central Government
 c/ Official (EPB)

d/ Fiscal Plan
 e/ Based on three-year average
 f/ 1973 is included
 g/ Includes current transfers (net)

BALANCE OF PAYMENTS, EXTERNAL ASSISTANCE AND DEBT
(amounts in millions of U.S. dollars at current prices)

	Actual				Estimated	Projected					Avg. Annual Growth Rate 1973-1981
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1981
SUMMARY BALANCE OF PAYMENTS											
Exports (incl. NPS)	1,113	1,341	1,587	2,205	4,048	5,045	5,714	6,499	7,760	9,711	12,971
Imports (incl. NPS)	1,903	2,107	2,515	2,606	4,469	6,056	6,827	7,686	8,387	10,532	13,200
Resource Balance (X-M)	-790	-766	-928	-401	-421	-1,011	-1,113	-1,187	-1,227	-881	-229
Interest (net)	-	-	-	-	-150	-167	-193	-286	-434	-684	-977
Direct Investment Income	-5	-37	-91	-140	-40	-50	-60	-80	-85	-138	-186
Workers' Remittance	(44)	(33)	(25)	(19)	-	-	-	-	-	-	-
Current Transfers (net)	246	180	171	170	260	241	230	220	210	200	200
Balance on Current Accounts	-549	-623	-848	-371	-342	-987	-1,136	-1,333	-1,536	-1,503	-1,192
Private Direct Investment	16	38	56	47	149	200	250	275	300	350	425
Official Capital Grants	56	122	135	-16	-	-	-	-	-	-	-
Public M&T Loans											
Disbursements	666	422	593	721	693	1,027	1,135	1,425	1,615	1,766	1,539
Repayments	-112	-205	-237	-216	-256	-243	-231	-247	-352	-554	-900
Net Disbursements	554	217	356	505	437	784	904	1,178	1,263	1,212	639
Other M&T Loans											
Disbursements	17	78	33	49	52	84	85	107	122	133	116
Repayments	-3	-8	-10	-9	-16	-18	-18	-19	-26	-42	-68
Net Disbursements	14	70	23	40	36	66	67	88	96	91	48
Short-Term Capital	77	249	224	-91	45	-	-	-	-	-	-
Change in Gross Reserves	-162	-57	49	-155	-325	-	-	-	-	-	-
Errors and omissions	-6	-16	6	41	-	-	-	-	-	-	-
EXTERNAL DEBT											
World Bank	-	-	-	-	-	-	-	-	-	-	-
IDA 1/	65	40	85	73	183	-	-	-	-	-	-
IDA 2/	15	15	7	26	20	-	-	-	-	-	-
ARL	25	20	81	68	100	-	-	-	-	-	-
Other Multilateral	-	-	-	-	-	-	-	-	-	-	-
Government	154	221	309	409	350	-	-	-	-	-	-
Suppliers	297	158	204	108	-	-	-	-	-	-	-
Financial Institutions	116	118	11	106	-	-	-	-	-	-	-
Bonds	-	-	-	-	-	-	-	-	-	-	-
Public Debt	30	-	-	-	-	-	-	-	-	-	-
Total Public M&T Loans	702	572	697	790	653	-	-	-	-	-	-
EXTERNAL DEBT											
World Bank	-	-	-	-	-	-	-	-	-	-	-
IDA 1/	94.7	47.1	1.8	1.2	3.7	-	-	-	-	-	-
IDA 2/	31.7	15.7	1.8	1.2	1.8	-	-	-	-	-	-
Suppliers	1,177.5	45.5	45.5	45.5	45.5	-	-	-	-	-	-
Financial Institutions	937.8	36.2	36.2	36.2	36.2	-	-	-	-	-	-
Bonds	294.4	11.4	11.4	11.4	11.4	-	-	-	-	-	-
Public Debt	5.0	0.2	0.2	0.2	0.2	-	-	-	-	-	-
Total Public M&T Debt	2,588.7	100.0	100.0	100.0	100.0	-	-	-	-	-	-
Other M&T Debts	206.8	-	-	-	-	-	-	-	-	-	-
Short-term Debt (disb. only)	-	-	-	-	-	-	-	-	-	-	-

... not applicable
... not available
... not available separately
... not included in total

e staff estimate
- nil or negligible
-- less than half the
smallest unit shown

1/ Fiscal years
2/ 1969-72 figures include interest

KOREA

THE STATUS OF BANK GROUP OPERATIONS IN THE REPUBLIC OF KOREA

A. Statement of Bank Loans and IDA Credits (as at February 28, 1975)

Loan or Credit Number	Year	Borrower	Purpose	US\$ Million		
				Amount (less cancellations)		
				Bank	IDA	Undisbursed
Five loans and credits fully disbursed				24.7	39.7	
600	1969	ADC	Irrigation	45.0		8.0
151	1969	Republic of Korea	Education		14.8	3.1
669	1970	Republic of Korea	Railways	40.0		2.9
234	1971	Republic of Korea	Livestock		7.0	.4
735	1971	KDFC	Dev. Fin. Co.	30.0		1.3
769	1971	Republic of Korea	Highways	54.5		1.4
283	1972	Republic of Korea	Irrigation		15.0	7.8
795	1972	ADC	Irrigation	33.0		32.4
335	1972	Republic of Korea	Agricultural Cr.		10.5	3.2
863	1972	Republic of Korea	Railways	40.0		16.6
905	1973	KDFC	Dev. Fin. Co.	40.0		11.0
906 & 394	1973	Republic of Korea	Education II	23.0	20.0	42.8
917	1973	Republic of Korea	Ports	80.0		77.5
942	1973	Republic of Korea	Seeds Production	7.0		6.8
953	1974	Republic of Korea	Tourism	25.0		25.0
956	1974	Republic of Korea	Highways II	47.0		33.7
994 *	1974	AFDC	Agriculture	13.0		13.0
1070 /a	1975	Republic of Korea	Secondary Cities	15.0		15.0
Total				517.2	107.0	301.9
of which has been repaid				12.3	0.3	
Total now outstanding				504.9	106.7	
Amount sold			2.0			
of which has been repaid			0.8	1.2		
Total now held by Bank and IDA (prior to exchange adjustment)				503.7	106.7	
Total undisbursed				267.5	34.4	301.9

/a Not yet effective

* Declared effective on March 19, 1975

B. STATEMENT OF IFC INVESTMENTS (as at February 28, 1975)

<u>Year</u>	<u>Obligor</u>	<u>Type of Business</u>	<u>Amount in US\$ million</u>		
			<u>Loan</u>	<u>Equity</u>	<u>Total</u>
1968	KDFC	Development financing	-	0.7	0.7
1969	Honam Silk Co.	Textiles	1.4	0.3	1.7
1970	Atlas Paper Co.	Pulp and paper	4.5	0.5	5.0*
1971	Korea Investment and Finance Corp.	Capital market development	-	0.7	0.7
1973	KDFC	Development Financing	-	0.4	0.4
1974	Gold Star & Co. Ltd.	Electronic Products	16.0	1.3	17.3
1974	Korea Investment and Finance Corp.	Capital market development	-	0.3	0.3
Total gross commitment			21.9	4.2	26.1
less cancellations, terminations, repayments and sales			<u>9.6</u>	<u>0.5</u>	<u>10.1</u>
Total commitments now held by IFC			<u>12.3</u>	<u>3.7</u>	<u>16.0</u>
Total undisbursed			<u>8.9</u>	<u>-</u>	<u>8.9</u>

* Cancelled at the request of the Company

PROJECTS IN EXECUTION ^{1/}

Loan No. 600 Pyongtaek-Kumgang Irrigation Project; US\$45.0 million
Loan of May 23, 1969; Closing Date: December 31, 1976

The Project includes irrigation for about 35,000 ha, improvement of drainage and roads, consolidation of paddy fields, benching of upland and tidal land reclamation. Construction was delayed by a reorganization of the executing agency and a delay in hiring consultants. The major project components (two sea dikes, the main distribution system and pumping plants) were largely completed by the end of 1974. Contracts for nearly all of the remaining work have been awarded. Cost considerations have led to the exclusion of about 5,000 ha of land from the project. Costs have risen from US\$90 million at appraisal to about US\$130 million largely because of the increased costs of right-of-way, engineering, administration and land consolidation. Preliminary estimates indicate increases in the price of rice will partially offset the effects of higher costs and reduced irrigable area. The economic rate of return is now estimated to be about 10 percent, compared with the appraisal estimate of 14 percent. The implementing agency (ADC) has reviewed ways of economizing on the remaining work which should lead to some marginal cost savings. About 82 percent of the Loan has been disbursed. Construction is progressing satisfactorily and is scheduled for completion by mid-1976.

Credit No. 151 First Education Project; US\$14.8 million Credit
of June 4, 1969; Closing Date: December 31, 1975

This Project comprises: (a) the expansion and equipping of 27 technical, commercial and agricultural high schools, 5 post-secondary higher schools and 4 university teacher training departments; and (b) 26 man-years of technical assistance and 20 man-years of overseas fellowships to support the development of agricultural and technical education. Project implementation, which was slow at commencement, has improved and the project is now 12 months behind schedule compared with the 15 months delay estimated a year ago. All civil works, furniture procurement, technical assistance and fellowships have been completed; 70 percent of the equipment has been procured and the remainder is expected to be delivered during 1975. The Credit is expected to be fully disbursed by the present Closing Date.

^{1/} These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

<u>Loan No. 669</u>	<u>Third Railway Project; US\$40.0 million Loan and</u>
<u>Credit No. 183</u>	<u>US\$15.0 million Credit of May 14, 1970; Closing Date:</u>
	<u>December 31, 1975</u>

The bulk of the Loan and Credit was earmarked for the purchase of freight cars, diesel locomotives, and telecommunications and track maintenance equipment. Progress is generally satisfactory except for delays in the procurement of some microwave equipment which has been re-tendered.

<u>Credit No. 234</u>	<u>Integrated Dairy Beef Development Project;</u>
	<u>US\$7.0 million Credit of February 11, 1971;</u>
	<u>Closing Date: March 31, 1977</u>

The development of about 700 small and medium-sized dairy farms by providing long-term loans and the construction and operation of two dairy products processing plants are the principal components of the Project which also includes the provision of management and technical services. Project execution has been satisfactory. To date, about 591 farmers have participated and farm loans of about US\$4.5 million equivalent have been approved. About 4,900 head of cattle have been purchased and two dairy plants have been constructed and are in operation. The proceeds of the Credit, except those earmarked for technical services, are expected to be fully committed by the end of this month.

<u>Loan No. 735</u>	<u>Third Korea Development Finance Corporation Project,</u>
	<u>US\$30 million Loan of May 14, 1971; Closing Date:</u>
	<u>August 31, 1975</u>

The Project is progressing satisfactorily. The Loan is fully committed.

<u>Loan No. 769</u>	<u>First Highway Project; US\$54.5 million Loan of</u>
	<u>June 29, 1971; Closing Date: November 30, 1975</u>

The construction of approximately 370 km of national highways between Jeonju and Busan was satisfactorily completed in December, 1973, at a final cost about five percent above the appraisal estimate. Feasibility studies and detailed engineering have been completed for 1,400 km and 900 km of national highways, respectively. A study of road maintenance and the establishment of a pilot maintenance organization formed the basis of the creation of a country-wide Highway Maintenance Organization which is being carried out under the Second Highway Project.

Loan No. 795
Credit No. 283

Yong San Gang Irrigation Project; US\$33.0 million Loan
and US\$15.0 million Credit of February 2, 1972; Closing
Date: September 30, 1977

This Project aims at transforming an area with the highest drought frequency in Korea into one with year-round irrigation and crop diversification. Also, there will be increased production of high value crops such as fruits and winter vegetables. Design work is proceeding satisfactorily and the work on four dams, the main canals and land consolidation has started. Award of the three remaining major contracts anticipated for canals and land consolidation will be delayed until next summer, with construction to start after the rice harvest, i.e. roughly a year later than scheduled at appraisal. The delay was caused mainly by financial difficulties attributed to price escalation and design modification. The cost increases will be partially compensated for by benefits attributable to the enlargement of the area to be irrigated by about 1,400 ha.

Credit No. 335

Agricultural Credit Project: US\$10.5 million
Credit of September 29, 1972; Closing Date:
September 1, 1976

The Credit supports a three year lending program to small farmers to develop orchards, sericulture and mushroom production and to encourage the breeding of poultry and swine. It also finances an organizational and accounting study of the National Agricultural Cooperative Federation (NACF) and the strengthening of its training facilities. The Project is progressing satisfactorily and its disbursement is proceeding on schedule.

Loan No. 863

Fourth Railway Project; US\$40.0 million Loan of
November 22, 1972; Closing Date: December 31, 1976

The main elements of the Project are: electrification of lines in the Seoul suburban area; purchase of electric railcars and locomotives; the completion of electrification of 350 km of line running from Seoul to the northeastern part of Korea; track and bridge renewal; provision of yard facilities; acquisition of passenger and freight cars; and improvement of facilities for the maintenance and repair of motive power and rolling stock. No major problems have been encountered; about 90 percent of the Loan proceeds have been committed.

Loan No. 905

Fourth KDFC Project; US\$40.0 million Loan of June 13,
1973; Closing Date: December 31, 1977

The Project is progressing satisfactorily.

Loan No. 906
Credit No. 394

Second Education Project; US\$23.0 million Loan and
US\$20.0 million Credit of June 13, 1973; Closing
Date: December 31, 1977

The Project provides equipment for and extensions to the buildings of: 18 technical and 14 agricultural high schools; ten higher schools/junior colleges for industrial, agricultural, fishery and nursing training; colleges of agriculture, engineering and natural sciences in nine universities and a merchant marine college; and ten junior teacher colleges and 12 colleges of education. It also includes pre-investment studies on health and management education. Project implementation has improved and is now six months behind schedule compared with nine months a year ago. Construction and equipment procurement are proceeding satisfactorily. Cost overruns on civil works, to be financed by the Government, are expected to be large due to the recent sharp increase in building construction costs. It is expected that the Project will be completed on schedule.

Loan No. 917

Ports Project; US\$80 million Loan of June 27, 1973;
Closing Date: June 30, 1979

The Project includes the provision of container and bulk cargo facilities and equipment at Busan and coal piers and handling equipment at Busan and Mukho. Some contracts for dredging and pier construction have been awarded. The design-work and preparation of tender documents for the remaining items are proceeding satisfactorily. Revised cost estimates show an increase of about 30 percent over appraisal estimates. A Phase II Port Development Study and consultants' services in connection with the establishment of a "Korean Port Authority" are proceeding satisfactorily.

Loan No. 942

Seeds Project; US\$7.0 million Loan of November 16,
1973; Closing Date: December 31, 1978

The Project consists of: (a) the installation of five field crop seed processing and storage facilities; (b) farm machinery for seed production; (c) procurement of seasonal seed inventories through the operation of a revolving fund; (d) seed testing laboratories and equipment; (e) crop research (financed in part by USAID); (f) feasibility studies for irrigation and area development; and (g) technical assistance. The Office of Seed Production and Distribution was established in November, 1974. The Government is finalizing a contract for consultant's services.

Loan No. 953

Kyongju Tourism Project; US\$25.0 million Loan of
January 4, 1974; Closing Date: December 31, 1978

The Project forms part of the first phase of the planned development of the Bomun Lake resort near Kyongju. It provides for a multi-purpose dam; an irrigation system for about 1,200 ha; improvement and expansion of the water supply and sewerage and solid waste disposal systems for the city of Kyongju and the resort area; installation of electrical supply and telecommunication facilities for the resort area; the construction and/or re-alignment of about 57 kms of roads; infrastructure including storm water drainage, environmental sanitation, community facilities, a golf course, a school for training hotel personnel; and a feasibility study for the development of tourism on Cheju Island. The Loan was declared effective on May 6, 1974. Final design for almost all Project components is complete and the first four contracts have been awarded.

Loan No. 956

Second Highway Project; US\$47.0 million Loan of
January 25, 1974; Closing Date: December 31, 1977

The Project, which forms part of the Government's 1972-76 road construction and paving program, consists of the construction, chiefly on new alignments, of about 130 kms of highways; feasibility studies by consultants of about 1,000 kms of national and provincial roads, followed by detailed engineering where justified; and the procurement of highway maintenance and workshop equipment for the extension of a new highway maintenance program from a pilot province to the remainder of the country. All construction and paving contracts have been awarded.

Loan No. 994

Integrated Agricultural Products Processing Project;
US\$13.0 million Loan of June 7, 1974; Closing Date:
June 30, 1979

The Project aims at integrating the on-farm production of commercial crops for export with efficient hygienic processing facilities using land that is presently idle or underutilized. It comprises (i) on-farm development of asparagus, oak mushrooms and mushrooms; (ii) construction of and improvements to facilities to process asparagus, oak mushrooms, mushrooms and fruits; and (iii) technical assistance including training of staff, services of consultants, etc. The terminal date for effectiveness of the Loan has been extended to April 15, 1975, to provide additional time for recruiting a Project Manager. The selection of a proposed Project Manager has been approved and, consequently, the Loan was declared effective on March 19, 1975.

Loan No. 1970

Secondary Cities Regional Project; US\$15.0 million
Loan of January 15, 1975; Closing Date: March 31, 1979

The principal aims of the Project are the establishment of an organizational framework for regional investment, planning and development and to improve working and living conditions in the secondary cities of the less developed Gwangju region. The main elements of the Project are: (i) housing sites and services in the cities of Yeosu, Mogpo and Gwangju (370,384 m²); (ii) a fishery harbor complex with industrial processing zone (215,385 m²) in Yeosu; (iii) a city market in Suncheon City (33,160 m²); and (iv) access roads i Yeosu and Mogpo (6.61 km). It also provides technical assistance to strengthen regional planning and development, to improve the utilization of existing water supply systems in the four cities, to assist the management and operation of the fishery complex and to carry out feasibility studies of project proposals identified under the UNDP-financed Phase II Regional Study.

KOREAFIFTH RAILWAY PROJECTLOAN AND PROJECT SUMMARY

Borrower: The Republic of Korea

Beneficiary: Korean National Railroad (KNR)

Amount: US\$100.0 million equivalent

Terms: The loan would be for a term of 25 years, including five years of grace, at an interest rate of 8-1/2 percent per annum.

Project

Description: The Project is KNR's Investment Plan for 1975-76 except for investments financed out of the proceeds of the Third and Fourth Railway Loans (669-KO and 863-KO). The Project will help KNR continue as a major carrier of freight and passengers by helping in: the upgrading, modernization and expansion of track, rolling stock, motive power and other equipment; the improvement of the efficiency of operation; and its financial recovery. The main components of the project are: an increase in station and line capacity and improvements in signalling; acquisition of rolling stock, diesel and electric locomotives, spare parts and repair facilities; track renewal and improvement; bridge strengthening; completion of electrification of 71 km of industrial lines; and other miscellaneous items.

Estimated Cost: The following table summarizes the estimated project expenditure and indicates the components to be financed from the proceeds of the proposed loan:

1/
Project Expenditure 1975-1976

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>	<u>Local</u>	<u>Foreign</u>	<u>Total</u>	<u>Loan Items</u>
	-----W billion-----			-----US\$ million-----			US\$ million
1. New line construction	0.60	-	0.60	1.24	-	1.24	-
2. Electrification							
(a) Industrial lines electrification	0.92	3.05	3.97	1.89	6.29	8.18	-
(b) Seoul suburban electrification	0.83	1.41	2.24	1.71	2.91	4.62	-
3. Increase in station and line capacity							
(a) Signalling	5.55	3.71	9.26	11.44	7.64	19.08	-
(b) Double tracking (27.3 km.)	4.43	-	4.43	9.14	-	9.14	-
(c) Other works 2/	9.16	0.81	9.97	18.89	1.68	20.57	1.7 3/
4. Way and structure renewals and improvements and track maintenance equipment	9.26	7.11	16.37	19.09	14.65	33.74	14.6
5. Motive power and rolling stock							
(a) Diesel locomotives (50 new), spare parts and repowering 52 locomotives	0.29	24.43	24.72	0.60	50.37	50.97	8.2 4/
(b) Electric locomotives (10) and spare parts	0.25	5.64	5.89	0.52	11.63	12.15	-
(c) Passenger cars (150) and wheelsets	0.11	8.94	9.05	0.23	18.44	18.67	18.5
(d) Freight cars (2,000) and wheelsets	4.12	17.53	21.65	8.49	36.14	44.63	36.1
(e) Other 2/	2.60	1.20	3.80	5.36	2.48	7.84	1.4 5/
6. Motive power and rolling stock repair facilities	0.62	1.26	1.88	1.28	2.59	3.87	2.6
7. Miscellaneous							
(a) Technical assistance and staff training	-	0.15	0.15	-	0.30	0.30	0.3
(b) Other 2/	<u>2.67</u>	<u>0.21</u>	<u>2.88</u>	<u>5.51</u>	<u>0.44</u>	<u>5.95</u>	<u>0.4 6/</u>
8. Total 1 to 7	41.41	75.44	116.84	85.39	157.56	240.95	83.8
9. Contingencies							
(a) Physical	3.96	2.78	6.74	8.15	5.74	13.89	3.0
(b) Price	<u>6.30</u>	<u>11.54</u>	<u>17.84</u>	<u>12.99</u>	<u>23.79</u>	<u>36.78</u>	<u>13.2</u>
10. <u>GRAND TOTAL</u>	51.67	89.76	141.43	106.53	185.08	291.61	100.0

NOTE:

- 1/ In this table, bridge girders, passenger cars and freight cars except 500 gondola cars procured in 1974, have been assumed as fully imported.
- 2/ See Table 10 for details
- 3/ Consists of rails for line capacity increase.
- 4/ The proposed loan will finance spare parts only. Balance for locomotive finance by US Export-Import Bank
- 5/ The proposed loan will finance only equipment for heating cars. Balance for the re-engining of railcars being financed by Government (on going scheme).
- 6/ Replacing of ticket printing machines.

Financing Plan: The financing plan proposed for the project is summarized below:

	<u>US\$ Million Equivalent</u>	<u>Percent</u>
Government	106.5	36.5
IBRD Loan	100.0	34.3
U.S. Export-Import Bank	48.4	16.6
Kreditanstalt fur Wiederaufbau (KfW)	9.3	3.2
European Consortium (for electrification)	21.3	7.3
Suppliers' Credits and other	<u>6.1</u>	<u>2.1</u>
Total	<u>291.6</u>	<u>100.0</u>

<u>Estimated Disbursements:</u>	<u>Bank Fiscal Year</u>	<u>Yearly US\$ million</u>	<u>Cumulative</u>
	1976	35.4	35.4
	1977	62.6	98.0
	1978	2.0	100.0

Procurement

Arrangements:

All items to be procured under the proposed loan (except spare parts) will be subject to international competitive bidding in accordance with the Bank's Guidelines. The procurement of spare parts, needed to build up a stock sufficient for the existing track maintenance machines and those for adequate regular maintenance of diesel locomotives (cf. paragraph 46 above), and involving expenditures of about \$8.7 million will be negotiated with original suppliers in consultation with the Bank. In bid evaluation Korean manufacturers of equipment will be allowed a preferential margin of 15 percent of the c.i.f. cost of competing imports or the relevant prevailing level of customs duties, whichever is the lower. Should local bids, in response to international tenders for bridge girders, passenger and freight cars, wheel sets and portal cranes, be successful, local cost financing from the proceeds of the proposed loan to the extent of the equivalent of \$27 million would be involved.

Appraisal Report: No. 610a-KO, dated March 24, 1975.

CASH FLOW STATEMENT 1969-1979
(Won Billions)

	Actual					Forecast					
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
<u>SOURCES OF FUNDS</u>											
Cash Generated By KNR											
Net Operating Revenue	7.9	5.3	(0.6)	1.8	2.7	(0.3)	4.3	9.4	19.5	32.1	33.6
Depreciation	3.5	3.9	4.0	4.5	4.9	5.9	7.3	9.2	10.9	12.0	13.1
Net Non Operating Revenue (Expense)	(1.8)	(0.5)	(0.7)	0.1	1.3	1.7	2.7	0.4	0.9	1.3	1.8
Total Cash Generated	9.6	8.7	2.7	6.4	8.9	7.3	14.3	19.0	31.3	45.4	48.5
Government Operating Subsidy					1.5	5.9	3.8	-	-	-	-
Increase in Severance Pay Provision						0.6	-	0.5	0.6	0.7	0.8
Funds Provided by Government	0.5	2.5	1.5	-	0.8	-	31.2	36.5	22.4	10.5	12.0
Borrowing:											
Proposed Bank Loan	-	-	-	-	-	-	15.0	33.5	-	-	-
Other	10.5	6.2	45.8	6.9	27.4	47.0	33.6	18.5	33.5	24.8	31.5
Total Borrowing	10.5	6.2	45.8	6.9	27.4	47.0	48.6	52.0	33.5	24.8	31.5
Decrease In Other Assets	-	-	-	22.9	-	-	-	-	-	-	-
Total Sources of Funds	20.6	17.4	50.0	36.2	38.6	60.8	97.9	108.0	87.8	81.4	92.8
<u>APPLICATION OF FUNDS</u>											
Capital Investment - Local Currency						15.5	23.9	30.6	17.9	17.3	17.2
" " - Foreign Exchange						26.8	49.1	52.0	33.5	24.8	31.5
Total Capital Investment	11.6	7.2	13.8	24.9	10.5	42.3	73.0	82.6	51.4	42.1	48.7
Debt Service - Interest Charges	1.6	1.8	3.3	5.8	6.5	6.9	11.9	15.7	24.1	26.2	29.0
- Repayment	1.2	3.3	5.5	10.7	8.0	7.9	8.5	8.3	12.1	11.7	12.0
Total Debt Service	2.8	5.1	8.8	16.5	14.5	14.8	20.4	24.0	36.2	37.9	41.0
Increase In Other Assets	0.3	7.9	28.8	-	10.3	-	-	-	-	-	-
Unexplained Charges to Earned Surplus	0.7	0.1	(0.3)	0.4	2.0	-	-	-	-	-	-
Net Change In Working Capital	5.2	(2.9)	(1.1)	(5.6)	1.3	3.7	4.5	1.4	0.2	1.4	3.1
Total Application of Funds	20.6	17.4	50.0	36.2	38.6	60.8	97.9	108.0	87.8	81.4	92.8

March 1975

BALANCE SHEETS

1969-1979

(Wen Billions)

Fiscal Dec. 31	1969	1970	1971 Actual	1972	1973	1974	1975	1976	1977 Forecast	1978	1979
<u>Current Assets</u>											
Cash	0.5	0.2	0.5	0.4	1.4	1.0	1.6	1.9	2.0	2.4	3.0
Accounts Receivable	-	-	-	3.6	4.5	3.3	4.9	6.2	8.2	9.8	11.2
Total Quick Assets	0.5	0.2	0.5	4.0	5.9	4.3	6.5	8.1	10.2	12.2	14.2
Inventory	6.5	6.8	11.2	3.7	4.0	7.3*	9.9	12.2	13.5	15.0	16.6
Total Current Assets	7.0	7.0	11.7	7.7	9.9	11.6	16.4	20.3	23.7	27.2	30.8
<u>Current Liabilities</u>											
Current portion of long-term debt	-	-	-	2.3	2.3	2.8	2.8	4.0	3.9	4.0	4.0
Accounts Payable	-	-	-	12.0	11.8	8.6	8.8	11.2	14.2	16.2	16.6
All Other	-	-	-	5.3	4.2	4.5	4.6	4.7	4.9	5.0	5.1
Total Current Liabilities	7.7	10.6	16.4	19.6	18.3	15.9	16.2	19.9	23.0	25.2	25.7
Net Working Capital	(0.7)	(3.6)	(4.7)	(11.9)	(8.4)	(4.3)	0.2	0.4	0.7	2.0	5.1
<u>Fixed Assets</u>											
Fixed Assets	-	-	173.1	197.4	207.1	257.7	328.4	409.0	460.4	504.5	555.2
Land	-	-	33.9	33.7	130.2	130.2	130.2	130.2	130.2	130.2	130.2
Gross Book Value	184.2	192.8	207.0	231.1	337.3	387.9	458.6	539.2	590.6	634.7	685.4
Less: Accumulated Depreciation	9.7	13.3	17.0	25.8	25.8	36.6	43.9	53.1	64.0	76.0	89.1
Net Book Value	174.5	179.5	190.0	205.3	311.5	351.3	414.7	486.1	526.6	558.7	596.3
Add: Construction in Progress	8.9	7.2	6.5	24.5	29.1	25.7	28.0	30.0	30.0	28.0	26.0
Total Net Fixed Assets	183.4	186.7	196.5	229.8	340.6	377.0	442.7	516.1	556.6	586.7	622.3
Deferred Assets 1/	4.4	5.0	32.5	-	-	22.0	22.0	22.0	22.0	22.0	22.0
<u>Other Assets</u>											
Assets Chgd. to Loan Acct/Not Recd.	0.4	0.1	-	-	-))))))
Investments	1.1	1.9	2.2	4.4	6.4	3.0)	3.0)	3.0)	3.0)	3.0)	3.0)
Prepaid & Other	3.7	10.5	11.6	0.1	0.1))))))
Total Other Assets	5.2	12.5	13.8	4.5	6.5	3.0	3.0	3.0	3.0	3.0	3.0
<u>TOTAL ASSETS</u>	<u>192.3</u>	<u>200.6</u>	<u>238.1</u>	<u>222.4</u>	<u>338.7</u>	<u>397.7</u>	<u>467.9</u>	<u>541.5</u>	<u>582.3</u>	<u>613.7</u>	<u>652.4</u>
Long Term Debt	32.1	35.0	75.3	80.5	100.5	162.3	203.0	245.5	267.0	280.0	299.5
Provision for Severance Pay	-	-	-	1.0	1.3	1.9	1.9	2.4	3.0	3.7	4.5
Government Contributions	-	-	-	-	-	-	31.2	67.7	90.1	100.6	112.6
<u>Equity and/or Ownership 2/</u>											
Revaluation of Assets -	68.9	71.4	72.9	77.6	177.1	177.1	177.1	177.1	177.1	177.1	177.1
Fixed Capital (Cash or in kind)	73.2	73.2	73.2	69.7	69.9	69.9	69.9	69.9	69.9	69.9	69.9
Accumulated Surplus (Deficit)	18.1	21.0	16.7	(6.4)	(10.1)	(13.4)	(15.2)	(21.1)	(24.8)	(17.6)	(11.2)
Total Equity and/or Ownership	160.2	165.6	162.8	140.9	236.9	233.6	231.8	225.9	222.2	229.4	235.8
<u>TOTAL EQUITY AND LIABILITIES</u>	<u>192.3</u>	<u>200.6</u>	<u>238.1</u>	<u>222.4</u>	<u>338.7</u>	<u>397.8</u>	<u>467.9</u>	<u>541.5</u>	<u>582.3</u>	<u>613.7</u>	<u>652.4</u>

- Note - 1/ Deferred loss on foreign exchange fluctuations.
 2/ Every five years R.O.K. permits revaluation of land
 3/ 1972 and 1973 figures adjusted according to audit reports

March 1975

Income Statement

1969-1979

(Won Billions)

Fiscal Year	Actual					Forecast					
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
<u>Operating Revenues</u>											
Passenger Revenue	18.1	19.4	17.3	20.7	22.8	29.9	39.3	44.9	47.5	51.9	55.0
Freight Revenues	11.1	11.1	11.6	13.3	15.7	20.1	26.6	28.8	31.6	34.7	37.7
Other Train Revenues	2.5	2.5	1.5	1.7	2.4	3.0	2.9	3.2	3.4	3.7	3.9
Miscellaneous	-	-	0.8	0.6	0.7	0.8	1.2	1.2	1.5	1.7	1.9
Total Operating Revenue	31.7	33.0	31.2	36.3	41.6	53.8	70.0	78.1	84.0	92.0	98.5
Add: (%) Pass Fare Increase							2.9	10%	10.5	10%	15.7
(%) Frt. Rate Increase							2.0	10%	7.6	15%	16.4
Sub-Total							4.9		18.1	20%	23.2
									32.1	10%	28.3
									47.2		53.8
Restated Operating Revenues	31.7	33.0	31.2	36.3	41.6	53.8	74.9	96.2	116.1	139.2	152.3
<u>Less: Operating Expenses</u>											
Labor			13.2	13.8	14.3	17.7	24.4	28.4	32.3	36.3	40.9
Fuel			3.9	4.2	6.3	12.1	14.7	16.7	18.2	20.0	21.9
Materials & Supplies			7.3	7.9	8.0	12.2	15.3	21.8	24.0	26.4	29.0
All Other			3.4	4.1	5.4	6.2	8.9	10.7	11.2	12.4	13.8
Total Cash Expenses	20.2	23.8	27.8	30.0	34.0	48.2	63.3	77.6	85.7	95.1	105.6
Add: Depreciation	3.6	3.9	4.0	4.5	4.9	5.9	7.3	9.2	10.9	12.0	13.1
Total Operating Expenses	23.8	27.7	31.8	34.5	38.9	54.1	70.6	86.8	96.6	107.1	118.7
Net Operating Revenue (Loss)	7.9	5.3	(0.6)	1.8	2.7	(0.3)	4.3	9.4	19.5	32.1	33.6
Less: Interest Charges	1.6	1.8	3.3	5.8	6.5	6.9	11.9	15.7	24.1	26.2	29.0
Net Revenue - Railway Operations	6.3	3.5	(3.9)	(4.0)	(3.8)	(7.2)	(7.6)	(6.3)	(4.6)	5.9	4.6
<u>Other Revenue/Expense</u>											
Non-Operating Revenue			0.9	1.0	1.7	1.5	2.4	2.1	2.5	3.0	3.5
Non-Operating Expense			(1.3)	(0.5)	(0.1)	(0.6)	(1.0)	(3.0)	(0.7)	(0.8)	(0.8)
Non-Recurring Expense			(0.3)	(0.4)	(4.9)	0.8	1.3	1.3	(0.9)	(0.9)	(0.9)
Other Revenue/Expense Net	(1.8)	(0.5)	(0.7)	0.1	(3.3)	1.7	2.7	0.4	0.9	1.3	1.8
Net Revenue - (Deficit)	4.5	3.0	(4.6)	(3.9)	(7.1)	(5.5)	(4.9)	(5.9)	(3.7)	(7.2)	(6.4)
Add: R.O.K. Subsidy 1/	-	-	-	-	1.5	5.9	3.8	-	-	-	-
Net Income - Adjusted	4.5	3.0	(4.6)	(3.9)	(5.6)	0.4	(1.1)	(5.9)	(3.7)	7.2	6.4
Add: Depreciation	3.6	3.9	4.0	4.5	4.9	5.9	7.3	9.2	10.9	12.0	13.1
Total Cash Income	8.1	6.9	(0.6)	0.6	(0.7)	6.3	6.2	3.3	7.2	19.2	19.5
Operating Ratio %	75	84	102	95	92	102	94	90	83	77	78
Interest Charge Coverage			-	0.3	0.4	-	0.4	0.6	0.8	1.2	1.2
Debt Service	3.4	1.7	-	0.5	0.5	0.5	0.7	0.8	0.9	1.2	1.3
Return On Net Fixed Assets	4.4	2.9	-	0.9	1.1	-	1.1	2.1	3.8	5.9	5.8

1/ Partial compensation for revenues foregone due to not implementing general rate increases in 1973.

2/ 1975 - 1979 figures at 1974 tariffs.

3/ Largely a loss on foreign exchange fluctuations.

N.B. - () Indicates Deficit.

Source: Actual, KNR Unaudited (1973 are audited figures)
Forecast, KNR Staff and mission.

March 1975

